CONNECTIVITY – MISSION CRITICAL

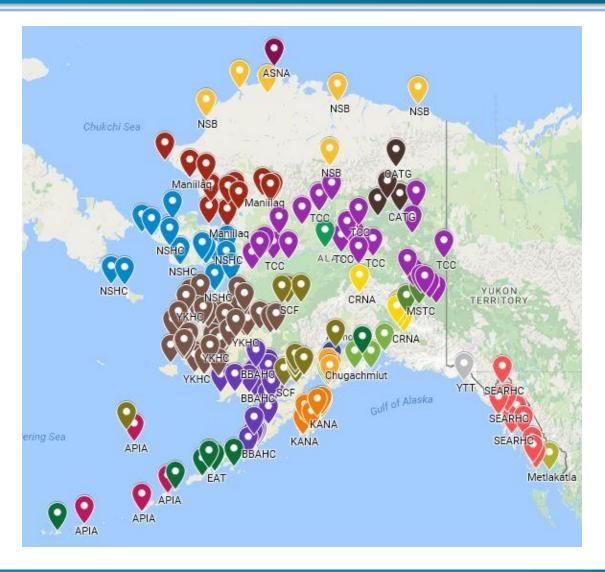
in the Alaska Tribal Health System

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AK Communities & Tribal Sites Currently Served



30 Organizations

- Serve 172,000 AI/AN
- 200+ sites
- 7 Hospitals

2001 Single Store & Forward Solution

2013 Single Video Solution

2011-2021 Shared EHR (19 THOs)

Current Telehealth Services

"Store & Forward" Telehealth has resulted in









The following ANMC Clinics offer telehealth consultations:

- Allergy/Immunology
- Cardiology
- Dermatology
- Diabetes
- Endocrinology
- Emergency Medicine (limited)
- ENT

- Gastroenterology
- General Internal Medicine
- Hepatitis
- HIV/EIS
- Infectious Disease
- Maternal Fetal Medicine
- Nephrology
- Neurology

- Neurosurgery
- Oncology
- Orthopedics
- Pain Clinic
- Palliative Care
- Primary Care
- Pulmonology
- Rheumatology

- Sleep Clinic
- Surgery Clinic
- Urology Clinic
- Wound Care
- Women's Health



Connectivity Outcomes

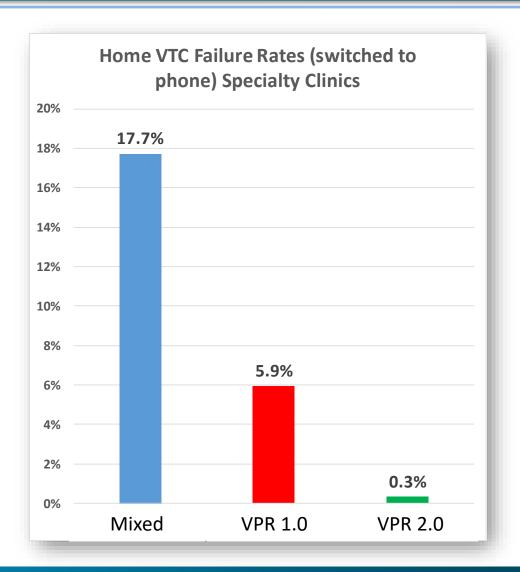
Visit "Failures" for ANMC Specialty Clinics

Mixed VTC platforms 554 (98 failed, 18%) & Processes

Standard process, 1,096 (65 failed, 6%) prior platform

Standard process & 614 (2 failed, <1%)
Zoom platform

Some success due to figuring out areas where video was impossible



Tested in Our World

REAL WORLD

LOW SPEED: 40% of our communities are on 2G

BIT LIMITS: Many communities have a 7 GB data cap/month

PRODUCTS

Doxy.me –primarily suited for DTP/DTC.

AmWell – market leader **InTouch Solo** –works for DTP/DTC and clinic-to-clinic.

Zoom – great general purpose VtC **Cisco Meetings (IHS)** –May work for clinical care, worth looking at for general purpose VTC

Microsoft Teams – May be good general purpose VTC

Vidyo Connect –current solution and include as the baseline

Vidyo IO – Next generation Vidyo

LAB TESTS

- Variable Speeds
- Clean
 Terrestrial
- Clean Satellite
- Dirty Satellite
- Horrible Network
- Functionality



CONNECTIVITY (USF Funded) IS REQUIRED FOR PATIENT CARE

of Tribal Health Organizations in Alaska rely on a hosted EHR located in the lower 48.

of all tribal health care sites in Alaska depend on connectivity to reach the EHR being used at the facility.

100% of all tribal health sites rely on connectivity to communicate to the next level of care to transfer patients, to communicate with patients, and to manage care of their patients.

Tribal Health Organization

Alaska Native Tribal Health Consortium

Aleutian Pribilof Islands Association

Chugachmiut

Copper River Native Association

Eastern Aleutian Tribes

Kenaitze Indian Tribe

Kodiak Area Native Association

Maniilaq Association

Mount Sanford Tribal Consortium

Native Village of Eklutna

Native Village of Eyak

Norton Sound Health Corporation

SouthCentral Foundation

SouthEast Alaska Regional Health Consortium

Yakutat Tlingit Tribe

Chickaloon Native Village

Knik Tribal Council

Native Village of Tyonek

St. George Traditional Council

Native Village of Chitina

Bristol Bay Area Health Corporation

Arctic Slope Native Association

Metlakatla Indian Community

Yukon-Kuskokwim Health Corporation

Seldovia Village Tribe

Ninilchik Traditional Council

Council of Athabascan Tribal Governments

Ketchikan Indian Community

Tanana Chiefs Conference

Tanana Tribal Council

Native Village of Karluk

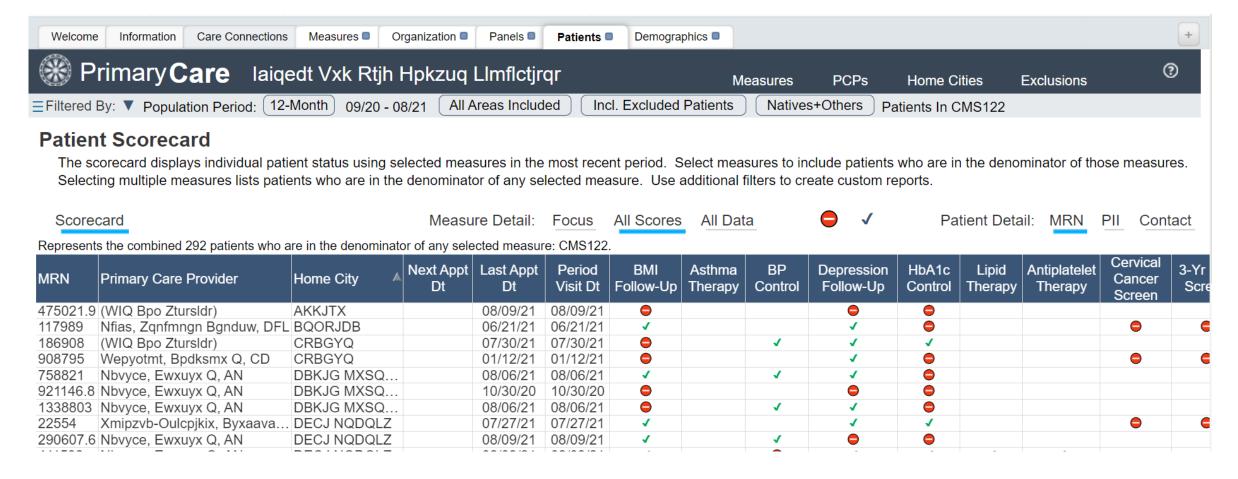
North Slope Borough

Connectivity – Beyond the EHR

- Cloud-Based Solutions
 - P2 Sentinel (Compliance / Audits)
 - Reportable Labs
 - Syndromic Surveillance
 - Sepsis Prevention
- Dictation Solutions
 - Dragon Medical One
 - Virtual Assistant
- New Services
 - Remote Telemetry
 - TeleICU, TeleStroke

- Patient Communication
 - DTC Telehealth
 - NICU "Baby Cams"
 - Video On Demand (VODA)
 - Inpatient Telehealth
 - Scheduling / Travel Mgmt
 - Wayfinding
 - Access to Medical Records
- Revenue Cycle Coding, Billing
- Analytics

Improving Primary Care at the Village Level Requires Analytics AND Connectivity

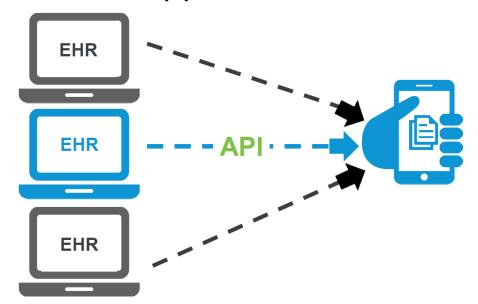




Data is Suddenly Portable

Interoperability is the ability of different information systems, devices or applications to connect, in a coordinated manner, within and across organizational boundaries to access, exchange and cooperatively use data amongst stakeholders, with the goal of optimizing the health of individuals and populations.

- Direct Secure Messaging
- CommonWell
- Sequoia Project
- APIs, Apps



Demands

Critical factors in Healthcare Connectivity:

- Reliability to clinics, hospitals, homes.
- Low latency for virtual sessions, dictation.
- Symmetric speeds for home-based VtC
- High quality, or better codecs, to avoid drops or degradation
- Higher bandwidth
- No data caps
- Affordable

The Rural Health Care (RHC) Program

Healthcare Connect Fund Program (HCF)

- Funding began January 1, 2014
- Allows Consortiums to apply, multi-year applications.
- Provides 65% discount on broadband services, equipment, some facilities.

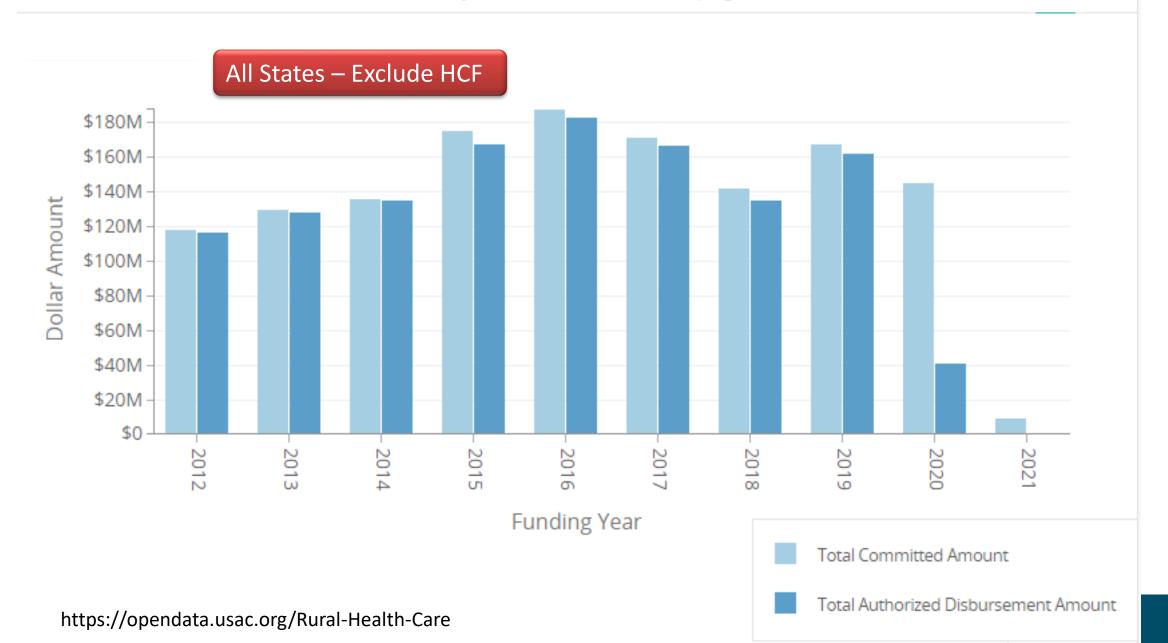
Telecommunications (Telecom) Program (466, 466A)

WE USE THIS

- Established in 1997
- Does not allow Consortium, requires annual application.
- Provides a subsidy such that Health Care Providers pay no higher than the urban rate for broadband services (based on Anchorage rates).
 - In Alaska the actual subsidy rate is ~ 99%.

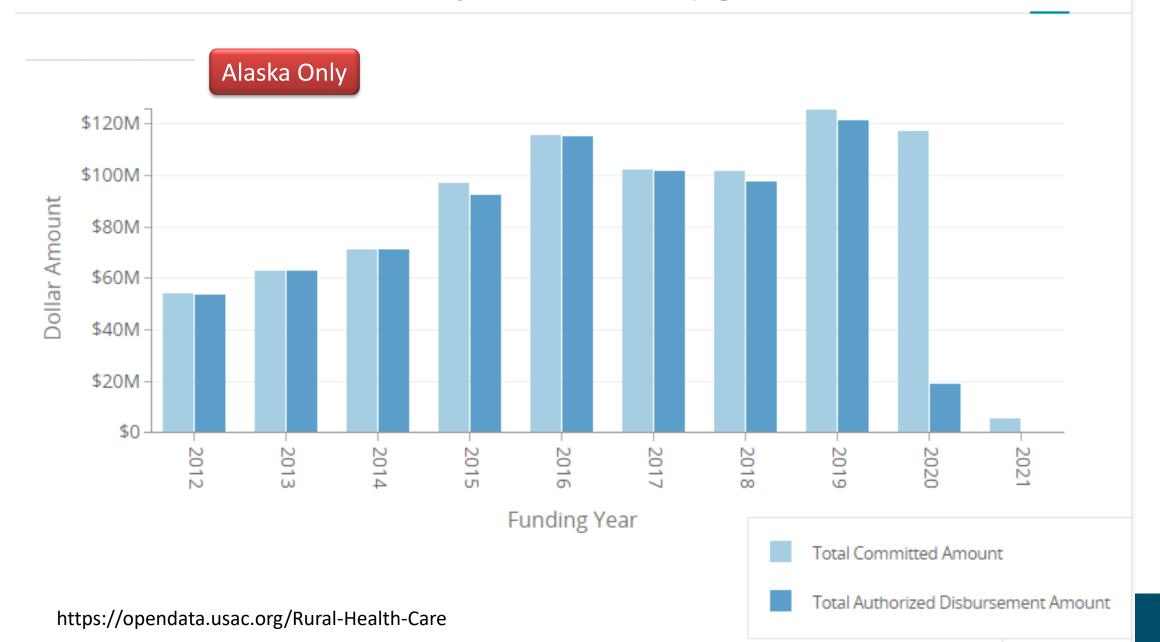
RHC Commitments and Disbursements Visualization

The Commitment and Disbursement amounts over the years of the Rural Health Care program.



RHC Commitments and Disbursements Visualization

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Funding Year 2020 Committed for Alaska (466)

333 HCPs

(93% of AK)

\$117M Committed

Rural Rate = 100x Urban Rate

Top Requests (by Bandwidth)

Bandwidth	# Applications (Filing HCP)	Average Monthly Urban Rate	Average Monthly Rural Rate	Rural Rate / Urban Rate
15 Mbps	59	\$302	\$51,592	171
10 Mbps	57	\$278	\$24,523	88
25 Mbps	38	\$388	\$65,155	168
20 Mbps	33	\$380	\$27,989	74
100 Mbps	21	\$830	\$30,546	37
30 Mbps	21	\$468	\$55,482	118
3 Mbps	20	\$233	\$10,185	44
5 Mbps	16	\$276	\$13,848	50
50 Mbps	15	\$693	\$50,228	72
Annual Cost	280	\$1,292,361	\$129,918,324	101

Challenges with Telecom "466" Program

Historic risk of pro-rated subsidies when cap exceeded.

- 2017 proposed 84.4% pro-rated subsidy would have cost the ATHS approximately \$18M in unplanned costs.
- Delays in commitment leave Telcos and THOs uncertain.
- "Cap" raised and tied to inflation not unlimited.
- Tiered priority model helps (e.g. Frontier, Rural).

USAC determines rural rates i.e. median model.

- Risk for extremely remote/expensive sites
- AK delayed implementation to Funding Year 2023.

The "Telecom Program" is considered the "legacy" program

- "... wise to treat it as something that won't be permanent and to start planning for that eventuality."
- When will newer technologies become available, and will rural rates approach urban rates?

Questions?

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